Denis L J Lafontaine

List of Publications by Year
in descending order

80	8,302	57758	64796
papers	citations	44 h-index	79 g-index

93	93	93	8687
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Melanoma addiction to the long non-coding RNA SAMMSON. Nature, 2016, 531, 518-522.	27.8	488
2	A new system for naming ribosomal proteins. Current Opinion in Structural Biology, 2014, 24, 165-169.	5.7	481
3	The nucleolus as a multiphase liquid condensate. Nature Reviews Molecular Cell Biology, 2021, 22, 165-182.	37.0	480
4	Tuning the ribosome: The influence of rRNA modification on eukaryotic ribosome biogenesis and function. RNA Biology, 2017, 14, 1138-1152.	3.1	479
5	The Complexity of Human Ribosome Biogenesis Revealed by Systematic Nucleolar Screening of Pre-rRNA Processing Factors. Molecular Cell, 2013, 51, 539-551.	9.7	387
6	The human 18S rRNA m6A methyltransferase METTL5 is stabilized by TRMT112. Nucleic Acids Research, 2019, 47, 7719-7733.	14.5	312
7	The cell proliferation antigen Ki-67 organises heterochromatin. ELife, 2016, 5, e13722.	6.0	237
8	Yeast Kre33 and human NAT10 are conserved 18S rRNA cytosine acetyltransferases that modify tRNAs assisted by the adaptor Tan1/THUMPD1. Nucleic Acids Research, 2015, 43, 2242-2258.	14.5	220
9	The nucleolus: structure/function relationship in RNA metabolism. Wiley Interdisciplinary Reviews RNA, 2010, 1, 415-431.	6.4	207
10	Noncoding RNAs in eukaryotic ribosome biogenesis and function. Nature Structural and Molecular Biology, 2015, 22, 11-19.	8.2	197
11	Birth of a nucleolus: the evolution of nucleolar compartments. Trends in Cell Biology, 2005, 15, 194-199.	7.9	193
12	The function and synthesis of ribosomes. Nature Reviews Molecular Cell Biology, 2001, 2, 514-520.	37.0	190
13	â€˜View From A Bridgeâ€™: A New Perspective on Eukaryotic rRNA Base Modification. Trends in Biochemical Sciences, 2015, 40, 560-575.	7.5	186
14	Mapping the cleavage sites on mammalian pre-rRNAs: Where do we stand?. Biochimie, 2012, 94, 1521-1532.	2.6	177
15	Birth of the snoRNPs: the evolution of the modification-guide snoRNAs. Trends in Biochemical Sciences, 1998, 23, 383-388.	7.5	171
16	Mammalian and yeast U3 snoRNPs are matured in specific and related nuclear compartments. EMBO Journal, 2002, 21, 2736-2745.	7.8	167
17	The DIM1 Gene Responsible for the Conserved m62Am62A Dimethylation in the 3â€²-Terminal Loop of 18 S rRNA is Essential in Yeast. Journal of Molecular Biology, 1994, 241, 492-497.	4.2	164
18	The reverse transcription signature ofN-1-methyladenosine in RNA-Seq is sequence dependent. Nucleic Acids Research, 2015, 43, gkv895.	14.5	163

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19	Involvement of human ribosomal proteins in nucleolar structure and p53-dependent nucleolar stress. Nature Communications, 2016, 7, 11390.	12.8	156
20	The Nucle(ol)ar Tif6p and Efl1p Are Required for a Late Cytoplasmic Step of Ribosome Synthesis. Molecular Cell, 2001, 8, 1363-1373.	9.7	150
21	Yeast 18S rRNA Dimethylase Dim1p: a Quality Control Mechanism in Ribosome Synthesis?. Molecular and Cellular Biology, 1998, 18, 2360-2370.	2.3	144
22	Nop58p is a common component of the box C+D snoRNPs that is required for snoRNA stability. Rna, 1999, 5, 455-467.	3.5	143
23	Pseudouridine Mapping in the Saccharomyces cerevisiae Spliceosomal U Small Nuclear RNAs (snRNAs) Reveals that Pseudouridine Synthase Pus1p Exhibits a Dual Substrate Specificity for U2 snRNA and tRNA. Molecular and Cellular Biology, 1999, 19, 2142-2154.	2.3	143
24	Synthesis and Assembly of the Box C+D Small Nucleolar RNPs. Molecular and Cellular Biology, 2000, 20, 2650-2659.	2.3	139
25	Precursors to the U3 Small Nucleolar RNA Lack Small Nucleolar RNP Proteins but Are Stabilized by La Binding. Molecular and Cellular Biology, 2000, 20, 5415-5424.	2.3	126
26	The human 18S rRNA base methyltransferases DIMT1L and WBSCR22-TRMT112 but not rRNA modification are required for ribosome biogenesis. Molecular Biology of the Cell, 2015, 26, 2080-2095.	2.1	124
27	AlkAnilineâ€Seq: Profiling of m⁷G and m³C RNA Modifications at Single Nucleotide Resolution. Angewandte Chemie - International Edition, 2018, 57, 16785-16790.	13.8	119
28	Ribosome biogenesis: An emerging druggable pathway for cancer therapeutics. Biochemical Pharmacology, 2019, 159, 74-81.	4.4	109
29	A â€˜garbage canâ€™ for ribosomes: how eukaryotes degrade their ribosomes. Trends in Biochemical Sciences, 2010, 35, 267-277.	7.5	98
30	Specialized box C/D snoRNPs act as antisense guides to target RNA base acetylation. PLoS Genetics, 2017, 13, e1006804.	3.5	92
31	Identification of sites of 2â€²-O-methylation vulnerability in human ribosomal RNAs by systematic mapping. Scientific Reports, 2017, 7, 11490.	3.3	91
32	Dhr1p, a Putative DEAH-Box RNA Helicase, Is Associated with the Box C+D snoRNP U3. Molecular and Cellular Biology, 2000, 20, 7238-7246.	2.3	87
33	SAMMSON fosters cancer cell fitness by concertedly enhancing mitochondrial and cytosolic translation. Nature Structural and Molecular Biology, 2018, 25, 1035-1046.	8.2	84
34	Structural and functional studies of Bud23â€“Trm112 reveal 18S rRNA N ⁷ -G1575 methylation occurs on late 40S precursor ribosomes. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E5518-26.	7.1	81
35	Genetic and Physical Interactions Involving the Yeast Nuclear Cap-Binding Complex. Molecular and Cellular Biology, 1999, 19, 6543-6553.	2.3	78
36	Trm112 Is Required for Bud23-Mediated Methylation of the 18S rRNA at Position G1575. Molecular and Cellular Biology, 2012, 32, 2254-2267.	2.3	73

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37	The nuclear poly(A) polymerase and Exosome cofactor Trf5 is recruited cotranscriptionally to nucleolar surveillance. Rna, 2009, 15, 406-419.	3.5	72
38	HydraPsiSeq: a method for systematic and quantitative mapping of pseudouridines in RNA. Nucleic Acids Research, 2020, 48, e110-e110.	14.5	72
39	The human box C/D snoRNAs U3 and U8 are required for pre-rRNA processing and tumorigenesis. Oncotarget, 2016, 7, 59519-59534.	1.8	69
40	The Evolutionarily Conserved Protein LAS1 Is Required for Pre-rRNA Processing at Both Ends of ITS2. Molecular and Cellular Biology, 2012, 32, 430-444.	2.3	67
41	Controlling the material properties and rRNA processing function of the nucleolus using light. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17330-17335.	7.1	62
42	Ribosome biogenesis factor Tsr3 is the aminocarboxypropyl transferase responsible for 18S rRNA hypermodification in yeast and humans. Nucleic Acids Research, 2016, 44, 4304-4316.	14.5	60
43	Cell size and fat content of dietary-restricted Caenorhabditis elegans are regulated by ATX-2, an mTOR repressor. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4620-9.	7.1	56
44	The 18S ribosomal <scp>RNA</scp> m ⁶ A methyltransferase Mettl5 is required for normal walking behavior in Drosophila. EMBO Reports, 2020, 21, e49443.	4.5	52
45	Is Ribosome Synthesis Controlled by Pol I Transcription?. Cell Cycle, 2007, 6, 11-15.	2.6	51
46	The Amaryllidaceae Alkaloid Haemanthamine Binds the Eukaryotic Ribosome to Repress Cancer Cell Growth. Structure, 2018, 26, 416-425.e4.	3.3	51
47	Trans-acting factors in yeast pre-rRNA and pre-snoRNA processing. Biochemistry and Cell Biology, 1995, 73, 803-812.	2.0	43
48	A multi-scale map of cell structure fusing protein images and interactions. Nature, 2021, 600, 536-542.	27.8	43
49	TOR regulates the subcellular distribution of DIM2, a KH domain protein required for cotranscriptional ribosome assembly and pre-40S ribosome export. Rna, 2008, 14, 2061-2073.	3.5	41
50	The Small Nucle(ol)ar RNA Cap Trimethyltransferase Is Required for Ribosome Synthesis and Intact Nucleolar Morphology. Molecular and Cellular Biology, 2004, 24, 7976-7986.	2.3	40
51	Dim2p, a KH-domain protein required for small ribosomal subunit synthesis. Rna, 2004, 10, 645-656.	3.5	40
52	A single N1-methyladenosine on the large ribosomal subunit rRNA impacts locally its structure and the translation of key metabolic enzymes. Scientific Reports, 2018, 8, 11904.	3.3	40
53	Carboxy-silane coated iron oxide nanoparticles: a convenient platform for cellular and small animal imaging. Journal of Materials Chemistry B, 2014, 2, 387-397.	5.8	36
54	Transcription-wide mapping of dihydrouridine reveals that mRNA dihydrouridylation is required for meiotic chromosome segregation. Molecular Cell, 2022, 82, 404-419.e9.	9.7	34

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55	Esf2p, a U3-Associated Factor Required for Small-Subunit Processome Assembly and Compaction. Molecular and Cellular Biology, 2005, 25, 5523-5534.	2.3	33
56	The ribosomal RNA m5C methyltransferase NSUN-1 modulates healthspan and oogenesis in Caenorhabditis elegans. ELife, 2020, 9, .	6.0	30
57	Use of the iNo score to discriminate normal from altered nucleolar morphology, with applications in basic cell biology and potential in human disease diagnostics. Nature Protocols, 2018, 13, 2387-2406.	12.0	29
58	Screening the Budding Yeast Genome Reveals Unique Factors Affecting K2 Toxin Susceptibility. PLoS ONE, 2012, 7, e50779.	2.5	25
59	Nucleolar structure across evolution: The transition between bi- and tricompartmentalized nucleoli lies within the class Reptilia. Journal of Structural Biology, 2011, 174, 352-359.	2.8	24
60	The nucleolus: When 2 became 3. Nucleus, 2011, 2, 289-293.	2.2	24
61	The role of OncoSnoRNAs and Ribosomal RNA 2â€™-O-methylation in Cancer. RNA Biology, 2021, 18, 61-74.	3.1	21
62	Probing small ribosomal subunit RNA helix 45 acetylation across eukaryotic evolution. Nucleic Acids Research, 2022, 50, 6284-6299.	14.5	21
63	A Functional Interface at the rDNA Connects rRNA Synthesis, Pre-rRNA Processing and Nucleolar Surveillance in Budding Yeast. PLoS ONE, 2011, 6, e24962.	2.5	20
64	Identification of Genes That Function in the Biogenesis and Localization of Small Nucleolar RNAs in Saccharomyces cerevisiae. Molecular and Cellular Biology, 2008, 28, 3686-3699.	2.3	19
65	Birth of Nucleolar Compartments: Phase Separation-Driven Ribosomal RNA Sorting and Processing. Molecular Cell, 2019, 76, 694-696.	9.7	18
66	Analysis of U8 snoRNA Variants in Zebrafish Reveals How Bi-allelic Variants Cause Leukoencephalopathy with Calcifications and Cysts. American Journal of Human Genetics, 2020, 106, 694-706.	6.2	17
67	Remodelin Is a Cryptic Assay Interference Chemotype That Does Not Inhibit NAT10-Dependent Cytidine Acetylation. ACS Medicinal Chemistry Letters, 2021, 12, 887-892.	2.8	16
68	The DEAH-box RNA helicase Dhr1 contains a remarkable carboxyl terminal domain essential for small ribosomal subunit biogenesis. Nucleic Acids Research, 2019, 47, 7548-7563.	14.5	15
69	HEATR3 variants impair nuclear import of uL18 (RPL5) and drive Diamond-Blackfan anemia. Blood, 2022, 139, 3111-3126.	1.4	15
70	Synergistic defects in pre-rRNA processing from mutations in the U3-specific protein Rrp9 and U3 snoRNA. Nucleic Acids Research, 2020, 48, 3848-3868.	14.5	14
71	DHX15-independent roles for TFIP11 in U6 snRNA modification, U4/U6.U5 tri-snRNP assembly and pre-mRNA splicing fidelity. Nature Communications, 2021, 12, 6648.	12.8	12
72	Cloning and Characterization of theKlDIM1 Gene fromKluyveromyces lactis Encoding the m26A Dimethylase of the 18S rRNA. Yeast, 1997, 13, 777-781.	1.7	11

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73	Nucleolar stress controls mutant Huntington toxicity and monitors Huntingtonâ€™s disease progression. Cell Death and Disease, 2021, 12, 1139.	6.3	10
74	Glutamine deficiency in solid tumor cells confers resistance to ribosomal RNA synthesis inhibitors. Nature Communications, 2022, 13, .	12.8	10
75	The catalytic activity of the translation termination factor methyltransferase Mtq2-Trm112 complex is required for large ribosomal subunit biogenesis. Nucleic Acids Research, 2020, 48, 12310-12325.	14.5	9
76	Nopp140-chaperoned 2â€²-O-methylation of small nuclear RNAs in Cajal bodies ensures splicing fidelity. Genes and Development, 2021, 35, 1123-1141.	5.9	9
77	Systematic mapping of rRNA 2â€™-O methylation during frog development and involvement of the methyltransferase Fibrillarin in eye and craniofacial development in Xenopus laevis. PLoS Genetics, 2022, 18, e1010012.	3.5	9
78	Regulatory Aspects of rRNA Modification and Pre-rRNA Processing. , 2014, , 281-288.		8
79	Visualization of Chromatin in the Yeast Nucleus and Nucleolus Using Hyperosmotic Shock. International Journal of Molecular Sciences, 2021, 22, 1132.	4.1	4
80	AlkAnilineâ€Seq: Profiling of m 7 G and m 3 C RNA Modifications at Single Nucleotide Resolution. Angewandte Chemie, 2018, 130, 17027-17032.	2.0	0